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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,919	11/06/2001	Sung Chun Choi	K-0341	4570

7590 02/12/2003

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EXAMINER

VO, TUYET THI

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/985,919

Applicant(s)

CHOI, SUNG CHUN

Examiner

Tuyet Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8, 12, 16, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-6, 13-15, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first and second trigger electrodes are physically connected to each other must be shown or the feature(s) canceled from the claims 3, 5. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Recitation "the second and third sustain voltage have the same voltage value" is not described in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-3, 7, 8, 12, 19 and 20 are rejected under 35 U.S.C. 102(a) as being anticipated by Ahn et al. (US Pub No. US2001/0026129), hereinafter Ahn.

Regarding claims 1-3, 7 and 8, Ahn discloses a plasma display panel (Figs. 4) comprising:

a scan/sustain electrode (32Y) formed at a peripheral portion of a discharge cell;

a common sustain electrode (32Z) formed to oppose the scan/sustain electrode at the peripheral portion of the discharge cell;

a first trigger electrode (34Y) formed to be adjacent to the scan/sustain electrode (32Y);

and

a second trigger electrode (34Z) formed adjacent to the common sustain electrode (32Z); wherein the first and second trigger electrodes (34Y, 34Z) formed between the scan/sustain electrode (32Y) and the common sustain electrode (32Z). The first and second trigger electrodes are electrically connected to each other when AC pulses alternating applied to the trigger electrode pair (34Y, 34Z) (col. 3, [0031] and [0037]).

Regarding claims 12, Ahn further discloses a method for driving a PDP constructed in a manner as above, the method comprising the step of alternating applying different AC pulses having a predetermined voltage to the scan/sustain electrode, the common electrode and the trigger electrode pair synchronously during the sustain period (col. 3, [0031], [0037]).

Regarding claims 19 and 20, Ahn also discloses a reset pulse is supplied to the second trigger electrode of the discharge cell during the reset period, scan pulses are sequentially

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supplied to the first trigger electrode during the address period and data pulses synchronized with the scan pulses are supplied to an address electrode formed in a lower substrate opposing the upper substrate (col. 3, [0031]).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. For best understood, claim 16 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Ahn.

Ahn discloses substantially the claim language as note above except for the second and third sustain pulse applied to the trigger electrode pair have the same voltage.

It would have been an obvious matter of design choice to utilize the same or different voltages to trigger electrode pairs in order to control the emission level of discharge cells, so as to obtain desired brightness of a plasma display panel. Such implementation is considered as a routine skill in the art.

Allowable Subject Matter

8. Claims 9-11 are allowed.

9. Claims 4-6, 13-15, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to suggest the scan/sustain electrode and common sustain electrode are formed

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between the first and second trigger electrodes as required in claims 4, 9. The prior art also lacks to provide a method for driving PDP comprising steps of supplying sustain pulses to the first trigger electrode having voltage value higher than that of the second trigger electrode while it is lower than the voltage pulse applied to the scan/sustain electrode required in claim 14 or similarly different voltage levels are applied to among trigger electrode pair, scan/sustain electrode and the common electrode in a manner as required in claims 15, 17 and 18.

Citation of pertinent prior art

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Kim (US Pat. 6,266,033) discloses a plasma display device.

Kim et al. (Pub. No. US 2002/0047566) discloses a plasma display panel.

Correspondence

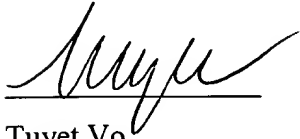
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 703 306 5497. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 703 308 4856. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 7722 for regular communications and 703 308 7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

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A handwritten signature in black ink, appearing to read 'Tuyet Vo', is written over a horizontal line.

Tuyet Vo

February 10, 2003